

How mindful self-care practices changed during the winter 2020 COVID-19 lockdown in Western Sydney

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Background and objective

Self-care strategies are important to maintain psychological wellbeing. The aim of this study was to explore how self-care changed during the first COVID-19 lockdown in winter 2020 and identify targets for interventions.

Methods

This was a cross-sectional study. Participants attending a COVID-19 testing clinic completed the Mindful Self-Care Scale (MSCS) and Hospital Anxiety and Depression Scale (HADS).

Results

A total of 332 participants completed questionnaires (mean age 38 years, 55% female). Self-care strategies used less frequently during lockdown when compared with pre-lockdown were in MSCS domains of Physical Care ($P < 0.001$), Supportive Relationships ($P < 0.001$), Supportive Structures ($P < 0.001$) and Mindful Awareness ($P < 0.001$). Mean anxiety and depression scores were 5.97 (standard deviation [SD] = 4.36) and 4.12 (SD = 3.594).

Discussion

Several pre-pandemic strategies were used less frequently, including individual activities not restricted during lockdown ('listening'; 'using images' to relax). This study provides insight into activities that are practised and reduced during a lockdown, which can guide wellbeing interventions to assist people in isolation.

THE COVID-19 PANDEMIC has devastated health and wellbeing worldwide.¹ In early 2020, governments around the world implemented lockdowns,² and in Australia, extremely restrictive stay-at-home orders were in place in most states between March and April 2020. In New South Wales (NSW), the first lockdown was firm, and it resulted in very few COVID-19 cases (a maximum of 213 cases in a single day).^{3,4} Restaurants, gyms, beaches and playgrounds were closed. Non-essential travel was prohibited, and working from home was mandated where possible. At that time, no vaccine was available, and few treatments were developed, so the public health strategy of 'test, trace, isolate and quarantine' was the predominant strategy to prevent transmission and death. Since then, second and third waves of COVID-19 have been experienced in NSW and Victoria, resulting in additional firm and long lockdowns of four months or more.⁴ In the summer of 2021-22, the Omicron variant resulted in extraordinary case numbers (in excess of 35,000 per day in NSW) despite a vaccination rate in excess of 93%. While a further lockdown was not mandated by public health order, the sheer number of cases and resulting close contacts caused a 'de-facto lockdown'. It is likely that repeated ad-hoc periods of self-isolation will be part of the foreseeable future in the most populous states despite vaccination and booster doses.

The negative impact of the pandemic and lockdowns on psychological wellbeing is well documented.⁵⁻⁹ Mindful self-care is one strategy for coping with the pandemic and the associated lockdowns, restrictions, grief and uncertainty. Practices such as physical exercise, using relationships for support and engaging in mindful activities have been shown to reduce stress in other situations, and their use has been encouraged during the pandemic.^{10,11} However, access to many activities has been reduced because of lockdown orders, and the pandemic has also disrupted normal routines that may have incorporated self-care activities. The negative impact on mental health has also led to lack of motivation to engage with activities that

would still be possible in a lockdown situation.¹² Understanding self-care behaviours before and during a hard lockdown is essential to provide education, strategies and interventions to support mental wellbeing during the COVID-19 pandemic and to increase preparedness for similar disruptions in the future. This is particularly relevant to primary care, where most mental healthcare in Australia is delivered.¹³ This study explored self-care during this unique time in history, when pandemic-related lockdowns imposed particular challenges to mental wellbeing.

The aims of this study were to understand how self-care changed during a COVID-19-related lockdown in 2020 and to identify positive behaviours that could be targeted with interventions to support wellbeing should future mandated lockdowns occur or when individuals are forced to self-isolate. The objective was to explore the self-care strategies that Australians used during the lockdown and to compare these to the strategies used prior to the pandemic.

Methods

A cross-sectional study design was used. Participants completed questionnaires and indicated the activities they normally participated in before the lockdown and during the first lockdown in 2020. Ethics approval was obtained from the Western Sydney Human Research Ethics Committee (Ref: HREC 2020/ETH01071) and the University of Notre Dame HREC (Ref: 2020-146S).

Study setting and eligibility

A convenience sample was recruited in an ambulatory COVID-19 testing clinic (Westmead Hospital, NSW, a quaternary referral hospital in Western Sydney). Eligible participants were aged ≥ 18 years and able to complete electronic questionnaires in English on a mobile device. All met the eligibility criteria for COVID-19 testing with nasopharyngeal and throat swabs. At the time of the study, this required the presence of symptoms or being a close contact of a confirmed case. On arrival at the clinic, clients were given a participant information sheet. Consenting

participants accessed three questionnaires on their personal mobile device: a demographic questionnaire, The Mindful Self-Care Scale (MSCS) and the Hospital Anxiety and Depression Scale (HADS).

Mindful Self-Care Scale - Brief

The MSCS - Brief is a self-reported 24-item scale that measures the frequency of 24 different self-care behaviours.¹⁰ It identifies mindful self-care behaviours that individuals adopt to improve their physical and mental health along with emotional wellbeing.¹ This validated scale consists of six self-care domains: Mindful Relaxation, Physical Care, Self-Compassion and Purpose, Supportive Relationships, Supportive Structures and Mindful Awareness. Each item requires a Likert scale response indicating the frequency of activity, ranging from 1 (never) to 5 (regularly).¹⁴ A higher score therefore indicates more frequent participation in the specified activity or domain.

Hospital Anxiety and Depression Scale (HADS)

The HADS was used to measure anxiety and depression.¹⁵ The scale has seven anxiety and seven depression questions, with each scale reported separately. Scores range from 0–21 for each of the depression and the anxiety scales, with a higher score indicating higher psychological morbidity (0–7 'normal', 8–10 'mild case' of anxiety or depression, 11–21 'moderate/severe case' of anxiety or depression).¹⁵

Data collection, management and analysis

Demographic data were collected: age, gender, healthcare worker (HCW) status (an HCW was defined as a person performing any role within a health institution), occupation (using Australian Bureau of Statistics subcategories),¹⁶ level of education and whether a previous COVID-19 test had been conducted. Participants completed the MSCS twice: the first time indicating their usual activities prior to the COVID-19 lockdown and the second indicating their activities during the most restrictive part of the first lockdown (approximately April–June 2020). Where data were

incomplete (less than 100% completion in more than two domains for one or both time periods), questionnaires were excluded from analysis. The HADS was completed once, with participants responding to questions about how they had been feeling during the week before completing the study. Analysis was conducted in SPSS using descriptive statistics, Chi-square and Student's t-tests examining differences in activities before and during the lockdown. A mixed analysis of variance was used to test for differences in mean domain scores between time points according to demographic variables. A *P* value of ≤ 0.05 was considered significant.

Results

Recruitment occurred from June to September 2020. During this time, the incidence of COVID-19 cases was low. The highest daily total during the study period was 23 cases on 10 August.⁴ A total of 471 participants were recruited. Following this, 139 incomplete questionnaires were excluded, leaving 332/471 (70.1%) in the final analysis. The excluded participants were not significantly different in age ($P = 0.30$) or gender ($P = 0.11$). Characteristics of the included participants are shown in Table 1. The mean age was 38.0 years (standard deviation [SD] = 12.7), and 75% were under the age of 45 years. The cohort was 55% female, and 36.1% were HCWs. The cohort was well educated, with 68% having a university degree.

HADS Anxiety results are shown in Appendix 1, available online only. Results for the six domains of the MSCS are shown in Table 2 and Appendix 2 (available online only). In Table 2, the total score and mean item score are shown for each domain, with a comparison between the pre-lockdown and during-lockdown scores. In Appendix 2, the mean score for each individual item is shown, with a comparison between the pre-lockdown and the during-lockdown scores. Appendix 3 (available online only) shows the difference in scores in the two time periods, with comparison between demographic groups.

Table 1. Participant characteristics (n = 332)

Characteristic	n	%	Characteristic	n	%
Age (years)			Occupation (Cont'd)		
Mean	37.97	-	Retired	5	1.5
Standard deviation	12.698	-	Unemployed	4	1.2
Age group			Self-employed	2	0.6
<30 years	97	29.2	Unknown	18	5.4
30–44 years	123	37.0	Total	332	100
45–59 years	59	17.8	Previous COVID-19 test		
≥60 years	16	4.8	No	194	58.4
Unknown	37	11.1	Yes	138	41.6
Total	332	100	Total	332	100
Gender			Education		
Female	184	55.4	Did not complete high school	7	2.1
Male	147	44.3	Completed high school	35	10.5
Prefer not to say	1	0.3	TAFE certificate or diploma	43	13
Total	332	100	University degree (Bachelor)	117	35.2
Healthcare worker			Postgraduate degree	110	33.1
Yes	120	36.1	Other	13	3.9
No	212	63.9	Prefer not to say	7	2.1
Total	332	100	Total	332	100
Occupation			HADS anxiety score		
Professional	153	46.1	Normal	220	66.3
Technicians and trades	45	13.6	Borderline	57	17.2
Student	45	7.2	Abnormal	55	16.6
Community and personal service	21	6.3	Total	332	100
Clerical and administration	26	7.8	HADS depression score		
Manager	15	4.5	Normal	270	81.3
Sales	7	2.1	Borderline	44	13.3
Home duties	5	1.5	Abnormal	18	5.4
Labourer	1	0.3	Total	332	100
Machinery operators and drivers	6	1.8	<i>HADS, Hospital Anxiety and Depression Scale</i>		

HADS results

Detailed analysis of anxiety and depression in this cohort has been previously reported.¹⁷ Overall, the mean anxiety score was 5.97 (SD = 4.36), which is within the 'normal' range (Appendix 1). For depression, the mean score was 4.12

(SD = 3.59), which is also normal. When the proportion of the cohort was grouped as 'normal', 'mild case', or 'moderate/severe case', anxiety (any severity) was found in 112/332 (33.7%) cases, and it was more prevalent than depression (any level), which was found in 62/332

(18.7%) cases. Women had higher mean anxiety scores than men (6.61 vs 5.14). Anxiety 'cases' (any severity) were more prevalent in women when compared with men (76/184, 41.3% vs 35/147, 23.8%; $P = 0.003$). There was no difference in the prevalence of depression between

genders (36/184, 19.6% vs 26/147, 17.7%; $P = 0.975$). Non-HCWs also had higher mean anxiety scores than HCWs (6.5 vs 5.0), and anxiety cases were more prevalent in non-HCWs when compared with HCWs (82/212, 38.7% vs 30/120, 25.0%; $P = 0.007$). Depression cases were also more prevalent in non-HCWs vs HCWs, with borderline statistical significance (46/212, 21.7% vs 16/120, 13.3%; $P = 0.052$).

Mindful Self-Care Scale results

Several domains showed an overall reduction in mean scores during the lockdown. However, on analysis by demographic variables, little difference was seen. There was no significant difference in domain scores according to age, gender, education, HCW status or HADS depression score between pre- and during-lockdown scores. Participants with a previous COVID-19 test had a reduction in 'Self-Compassion and Purpose' score, and those with anxiety had a reduction in 'Supportive Relationships' scores (Appendix 3).

MSCS Domain 1: Mindful Relaxation

The Mindful Relaxation domain includes four items related to being creative and relaxing using sounds (eg music), images (eg art or movies) or smells (eg candles or baking). There was no statistically significant change in the total or mean (per item) scores for Mindful Relaxation during the lockdown when compared with the pre-lockdown period (Table 2). However, a difference was found in participation in individual activities within the domain (Appendix 2). Participants reported a significant reduction in 'listening to relax' (3.46 vs 3.35; $P = 0.01$) and 'seeking images to relax' (3.01 vs 2.87; $P = 0.003$). There were no significant changes in 'creative activities' (2.83 vs 2.82; $P = 0.75$) and 'seeking smells to relax' (2.33 vs 2.37; $P = 0.28$).

MSCS Domain 2: Physical Care

The Physical Care domain has five items that include nutritious eating (eg fruits, vegetables) and activities such as exercise (30–60 minutes), sports or dance classes, sedentary activities

(eg watching television) and yoga or mind-body practices (eg Tai chi, martial arts). There was a statistically significant decrease in the total and mean (per item) scores for Physical Care activities over the lockdown (Table 2). There was a significant reduction in Physical Care activities such as nutritious eating (3.97 vs 3.85; $P = 0.003$), exercise (3.46 vs 3.19; $P < 0.001$), sports/other physical activities (2.59 vs 1.92; $P < 0.001$) and yoga and mind-body activities (1.86 vs 1.78; $P < 0.05$). However, no significant changes occurred in sedentary activities during the lockdown (2.22 vs 2.20; $P = 0.631$).

MSCS Domain 3: Self-Compassion and Purpose

The Self-Compassion and Purpose domain includes four items that involved participants acknowledging their challenges and difficulties, adopting supportive and comforting self-talk (eg my effort is valuable), permitting themselves to feel feelings and finding meaning/purpose in work/school life. There was no statistically significant change in the total or mean (per item) scores for Self-Compassion and Purpose during the lockdown ($P > 0.05$). There were some statistically significant differences in individual activities (Appendix 2). Participants reported a significant increase in 'supportive and comforting self-talk' (2.74 vs 2.87; $P = 0.003$) and a decrease in 'finding meaning and purpose in work/school life' (3.48 vs 3.25; $P < 0.001$).

MSCS Domain 4: Supportive Relationships

The Supportive Relationships domain includes four items: 'spending time with supportive people', 'feeling supported', 'feeling listened to (by a friend/counsellor)' and 'confident people will respect decision to say no'. There was a statistically significant decrease in the total or mean (per item) score for Supportive Relationships during the lockdown ($P < 0.001$; Table 2). Participants reported significant decreases in Supportive Relationship components such as 'spending time with supportive people' (4.18 vs 3.68; $P < 0.001$), 'feeling supported' (4.18 vs 4.02; $P < 0.001$) and 'feeling listened

to' (4.10 vs 3.99; $P = 0.003$). However, there were no significant changes to people feeling confident saying no (4.1 vs 4.05; $P > 0.185$).

MSCS Domain 5: Supportive Structure

The Supportive Structure domain has four items: 'organising a productive work/schoolwork area', 'maintaining manageable schedules', 'balancing external and personal demands' and 'maintaining a comfortable living environment'. There was significant change in the Supportive Structures domain in total and mean (per item) scores ($P < 0.0001$; Table 2). Participants reported a significant reduction in 'maintaining manageable schedules' (4.11 vs 3.61; $P < 0.001$), 'work/schoolwork area being organised' (4.15 vs 3.98; $P < 0.001$) and 'maintaining comfortable living environments' (4.11 vs 3.96; $P < 0.001$). On subgroup analysis, a lower MSCS domain score was associated with lower levels of education pre-lockdown ($P = 0.025$). This was not sustained during lockdown ($P = 0.146$), and there was no association between level of education and change in score between time periods.

MSCS Domain 6: Mindful Awareness

The Mindful Awareness domain asks about three states of calm: 'calm awareness of thoughts', 'of feelings', and 'of body'. There was a statistically significant decrease in Mindful Awareness during the lockdown period, as indicated by a decrease in both the total and mean (per item) scores ($P < 0.001$; Table 2). There was a significant decrease in all three items: 'calm awareness of thoughts' (3.70 vs 3.58; $P = 0.001$), 'of feelings' (3.74 vs 3.57; $P < 0.001$) and 'of body' (3.72 vs 3.58; $P < 0.001$).

Discussion

Self-care is an evidence-based strategy to manage stress, and this has been more important than ever during the COVID-19 pandemic. This pragmatic study, conducted in a busy clinic during a pandemic, explored how self-care practices were affected by the initial COVID-19 lockdown in 2020.

The MSCS has been used in a number of previous research studies evaluating self-care in people with illness,

Table 2. Results of Mindful Self-Care Survey - Brief

MSCS domain	Pre-lockdown		During lockdown		t	P value
	Mean	SD	Mean	SD		
Mindful Relaxation						
Total score	11.64	3.563	11.41	3.671	1.789	0.075
Average score (per item)	2.91	0.89	2.85	0.92	1.79	0.07
Physical Care						
Total score	14.12	3.557	12.92	3.428	7.232	<0.001
Average score (per item)	2.82	0.71	2.58	0.69	7.23	<0.001
Self-Compassion and Purpose						
Total score	12.58	3.534	12.520	3.796	0.554	0.580
Average score (per item)	3.14	0.88	3.13	0.95	0.55	0.58
Supportive Relationships						
Total score	16.56	3.127	15.74	3.589	6.34	<0.001
Average score (per item)	4.14	0.78	3.93	0.90	6.34	<0.001
Supportive Structure						
Total score	16.44	3.255	15.58	3.672	6.87	<0.001
Average score (per item)	4.11	0.81	3.89	0.92	6.87	<0.001
Mindful Awareness						
Total score	11.15	2.661	10.73	2.885	0.613	<0.001
Average score (per item)	3.72	0.89	3.58	0.96	4.44	<0.001

MSCS, Mindful Self-Care Scale; SD, standard deviation

mostly focused on eating disorders,¹⁸ embodiment¹⁹ and burnout.²⁰⁻²² While it has been validated in several populations, including HCWs, 'normal' scores for a general population, particularly Australian, are not available. The most relevant cohort was a healthy population of young college students in the USA. It showed higher MSCS scores (more frequent self-care practices) in that population when compared with the pre-lockdown scores in the present study population for all domains except 'Supportive Structure'.¹¹ This may indicate that the present cohort of slightly older, working professionals uses structure (and control of their surroundings) as a stress management strategy and may find it more difficult to incorporate other, more time-consuming, strategies into their lives.

Importantly, this study provided insight into the 'usual' self-care practices of the cohort and showed how these changed during the first hard lockdown. The key findings from the study are: that the most frequently practised domains pre-lockdown were 'Supportive Structure', 'Supportive Relationships' and 'Mindful Awareness'; that all of these domain scores dropped significantly during the lockdown; and that many individual self-care activities were practised less frequently during lockdown even though they were not prohibited by public health orders.

On closer inspection of the domains experiencing a significant decline, it is unsurprising to see the effect of the pandemic on these areas. Structure was challenging to maintain as normal routines

were affected. The change to working and schooling from home resulted in changed routines as well as requiring changes to physical surroundings to make space for home-based activities. Supportive relationships were affected as social interactions reduced and relationships with people in the same household were under strain. Mindful awareness, focused around a sense of calm, was challenging to maintain. Within these domains, there are individual activities that could be targeted with interventions. For example, in Supportive Structures, explicitly organising the schedule of the day, keeping the work area organised and maintaining a separate living area, where possible, may improve the sense of control. Similarly, in Supportive Relationships, the additional

effort required to seek out friends who are supportive and listen well may increase the sense of wellbeing in this area.

As well as focusing on increasing activities in the domains that experienced the greatest decline, increasing activities in other areas may improve wellbeing. The observed reductions in physical activities such as exercise, sports, dance and exercise classes were expected because of the closure of gyms, sports fields and indoor public venues, which limited opportunities to engage in many regular physical care activities.^{5,23} However, there are some physical self-care activities that could still be performed during a lockdown setting. This study found a reduction in nutritious eating and yoga/mind-body exercises in people who already practised these activities. This may have occurred as a result of changes in usual routine or could be related to lack of motivation, which has been reported during the pandemic.¹² People who regularly participate in these activities should be encouraged to continue them, as healthy eating and mind-body activities such as Tai chi can be done at home. The importance of nutritious eating can be reinforced, and yoga could be presented as an alternative 'virtual' activity for people or teams who usually participate in organised sport.

Mindful relaxation is another activity that can easily be practised at home during lockdown; however, a reduction in the activities of 'listening to relax' and 'seeking images (art or movies) to relax' was noted. These activities could be performed at home with minimal effort and expense. The reason for the reduction in these activities is unclear; it may be due to lack of motivation or to additional time spent working at home. In particular, listening was the most frequent activity in this domain at baseline, and it experienced a dramatic reduction in participation. Doing 'creative activities', also in this domain, did not show a reduction; however, baseline participation was much less frequent. This is an area that could be targeted further to increase overall wellness in this domain by encouraging people to do painting, puzzles, sewing, sculpture and similar activities. A previous study showed

adult colouring to be an effective mindful strategy to address anxiety, and it is another activity that can be done at home, either alone or in company.²⁴

More than a third of the participants in this study were HCWs. The pandemic has taken a particularly high toll on the mental health of frontline workers.^{6,25} The present study showed unexpected results, indicating that HCWs had lower levels of anxiety and similar levels of depression to the general population of participants. HCWs as a group did not report a significant change in mean MSCS scores during lockdown. It is possible that the increased knowledge that HCWs have about COVID-19 and their understanding of the significance of the low level of community transmission produced lower anxiety levels in HCWs. Alternatively, it may reflect the success of existing interventions to support the mental wellbeing of HCWs or the Australian experience of COVID-19.

The information derived from this study provides some insight into self-care behaviours during a COVID-19 lockdown. This could be used to develop psychological interventions on a population level should future pandemics require similar public health measures. Several areas suitable for brief interventions in general practice consultations have also been noted: practitioners can communicate information about the need to continue usual self-care strategies such as healthy eating, relaxing using music or images and remaining mindfully connected to thoughts and emotions. Specific interventions to increase social supports and avoid isolation and advice about novel ways to keep the house organised while working from home may help to minimise the adverse psychological impact of pandemic lockdowns. These strategies could also be recommended for people undergoing self-isolation or quarantine related to potential exposure to the virus, as widespread lockdowns are less likely to be mandated in the future.

This study has several strengths and limitations. Strengths include the relatively large sample size, the application of standardised and validated questionnaires

and the comprehensive range of coping strategies that were evaluated. Nonetheless, significant limitations are acknowledged. The cross-sectional design has a risk of recall bias; however, the study was conducted as restrictions were lifting, so recall bias related to activities undertaken during the lockdown should be minimal. A response rate cannot be calculated as the exact number of potential participants who received invitations is unknown. This is due to the challenge of conducting research in a busy COVID-19 testing centre during a pandemic, where clinical care rather than research is necessarily prioritised. There were many incomplete questionnaires that were excluded; however, brief analysis of demographic variables suggests that this may not have led to significant bias. The sample was young, well educated, English speaking, predominantly female with a significant HCW population and is therefore not representative of the general population. In addition, the fact that the participants were attending for COVID-19 testing may indicate that this is a more anxious population, affecting the HADS scores in particular.

Changes to self-care in many physical, relaxation and mindful awareness activities were identified. Many of the self-care activities that were practised less frequently were indoor activities that could be continued during times of restricted activity. It remains uncertain whether lockdowns and quarantine will be required in the future. If needed, interventions could focus on education about the need to continue simple self-care activities, and general practitioners are well placed to provide this. Further research could explore self-care in the second year of the pandemic and could evaluate specific population or individual interventions that encourage self-care.

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References

- World Health Organization. WHO Coronavirus Disease (COVID-19) Dashboard. Geneva, CH: WHO, 2020. Available at <https://covid19.who.int> [Accessed 30 July 2022].
- Sun GQ, Wang SF, Li MT, et al. Transmission dynamics of COVID-19 in Wuhan, China: Effects of lockdown and medical resources. *Nonlinear Dyn* 2020;1-13. doi: 10.1007/s11071-020-05770-9.
- Wahlquist C. Australia's coronavirus lockdown – The first 50 days. *The Guardian*. 1 May 2020.
- NSW Government. COVID-19 data and statistics. St Leonards, NSW: DoH, 2021. Available at www.nsw.gov.au/covid-19/stay-safe/data-and-statistics. [Accessed 30 July 2022].
- González-Sanguino C, Ausín B, Castellanos MÁ, et al. Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain Behav Immun* 2020;87:172–76. doi: 10.1016/j.bbi.2020.05.040.
- Kang L, Ma S, Chen M, et al. Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain Behav Immun* 2020;87:11–17. doi: 10.1016/j.bbi.2020.03.028.
- Wang Y, Di Y, Ye J, Wei W. Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychol Health Med* 2021;26(1):13–22. doi: 10.1080/13548506.2020.1746817.
- Zhou SJ, Zhang LG, Wang LL, et al. Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. *Eur Child Adolesc Psychiatry* 2020;29(6):749–58. doi: 10.1007/s00787-020-01541-4.
- Griffiths D, Sheehan L, Van Vreden C, Petrie D, Sim M, Collie A. The community lockdown in Victoria, Australia (July–October 2020): Implications for health during the second COVID-19 wave. Clayton, Vic: Monash University, 2020.
- Cook-Cottone CP, Guyker WM. The development and validation of the Mindful Self-Care Scale (MSCS): An assessment of practices that support positive embodiment. *Mindfulness* 2018;9(1):161–75. doi.org/10.1007/s12671-017-0759-1.
- Feng X, Mosimah CI, Sizemore G, Goyat R, Dwibedi N. Impact of mindful self-care and perceived stress on the health related quality of life among young-adult students in West Virginia. *J Hum Behav Soc Environ* 2019;29(1):26–36. doi: 10.1080/10911359.2018.1470953.
- Robinson E, Boyland E, Chisholm A, et al. Obesity, eating behavior and physical activity during COVID-19 lockdown: A study of UK adults. *Appetite* 2021;156:104853. doi: 10.1016/j.appet.2020.104853.
- The Royal Australian College of General Practitioners (RACGP). Mental health care in general practice: Position statement. East Melbourne, Vic: RACGP, [date unknown]. Available at www.racgp.org.au/advocacy/position-statements/view-all-position-statements/clinical-and-practice-management/mental-health-care-in-general-practice [Accessed 30 July 2022].
- Davies S. Sliding walls, hideable offices: How pandemic could change home design. Toronto, ON: Thomson Reuters, 2020.
- Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand* 1983;67(6):361–70. doi: 10.1111/j.1600-0447.1983.tb09716.x.
- Australian Bureau of Statistics. Australian and New Zealand Standard Classification of Occupations Version 1.3. Belconnen, ACT: ABS, 2019. Available at www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1220.0Main+Features12013,%20Version%201.3?OpenDocument [Accessed 30 July 2022].
- Brennan ME, Marinovich ML, Verdonk B, Vukasovic M, Coggins A. Symptoms of anxiety, depression and fear in healthcare workers and non-healthcare workers undergoing outpatient COVID-19 testing in an urban Australian setting. *Aust J Prim Health* 2021;27(6):442–49. doi: 10.1071/PY21139.
- Cook-Cottone C, Talebkhah K, Guyker W, Keddie E. A controlled trial of a yoga-based prevention program targeting eating disorder risk factors among middle school females. *Eat Disord* 2017;25(5):392–405. doi: 10.1080/10640266.2017.1365562.
- Gattario KH, Frisén A, Teall TL, Piran N. Embodiment: Cultural and gender differences and associations with life satisfaction. *Body Image* 2020;35:1–10. doi: 10.1016/j.bodyim.2020.07.005.
- Hotchkiss JT. Mindful self-care and secondary traumatic stress mediate a relationship between compassion satisfaction and burnout risk among hospice care professionals. *Am J Hosp Palliat Care* 2018;35(8):1099–108. doi: 10.1177/1049909118756657.
- Hotchkiss JT, Leshner R. Factors predicting burnout among chaplains: Compassion satisfaction, organizational factors, and the mediators of mindful self-care and secondary traumatic stress. *J Pastoral Care Counsel* 2018;72(2):86–98. doi: 10.1177/1542305018780655.
- Cooper AL, Brown JA, Rees CS, Leslie GD. Nurse resilience: A concept analysis. *Int J Ment Health Nurs* 2020;29(4):553–75. doi: 10.1111/inm.12721.
- Hopkins ME, Davis FC, Vantighem MR, Whalen PJ, Buccini DJ. Differential effects of acute and regular physical exercise on cognition and affect. *Neuroscience* 2012;215:59–68. doi: 10.1016/j.neuroscience.2012.04.056.
- Rajendran N, Mitra TP, Shahrestani S, Coggins A. Randomized controlled trial of adult therapeutic coloring for the management of significant anxiety in the emergency department. *Acad Emerg Med* 2020;27(2):92–99. doi: 10.1111/acem.13838.
- Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open* 2020;3(3):e203976. doi: 10.1001/jamanetworkopen.2020.3976.